



HIGH VOLTAGE RECTIFIER

R1200F THRU R5000F

VOLTAGE RANGE
CURRENT

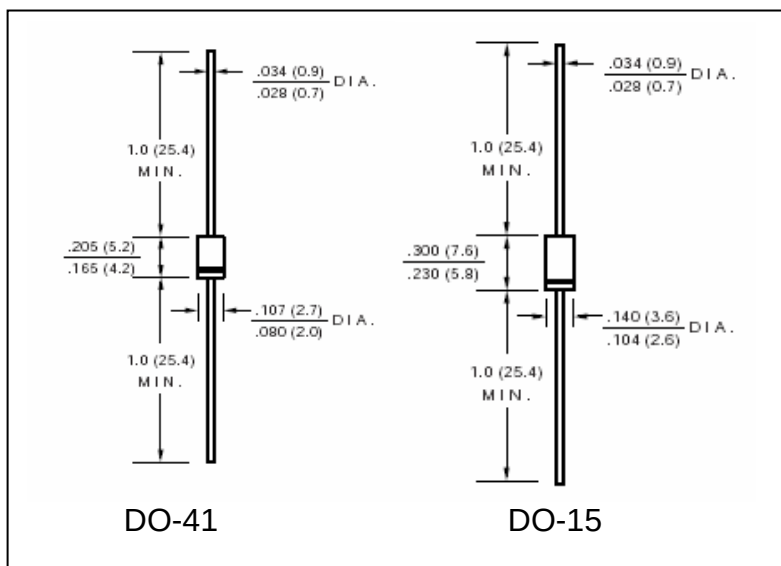
1200 to 5000 Volts
0.2 to 0.5 Ampere

FEATURES

- Low Leakage
- High Surge Capacity
- High current capability
- High Temperature soldering guaranteed:
260°C / 10 second, 0.375" (9.5mm) lead length

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V – 0 rate flame retardant
- Polarity: Color Band denotes cathode end
- Lead: Plated axial lead, solderable per
MIL – STD-202E Method 208C
- Mounting Position: Any
- Weight: 0.012 ounce, 0.33 gram (DO-41)
0.014 ounce, 0.39 gram (DO-15)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	R 1200F	R 1500F	R 1800F	R 2000F	R 2500F	R 3000F	R 4000F	R 5000F	UNIT
Package		DO-41	DO-41	DO41	DO-41	DO-15	DO-15	DO-15	DO-15	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1200	1500	1800	2000	2500	3000	4000	5000	Volts
Maximum RMS Voltage	V _{RMS}	840	1050	1260	1400	1750	2100	2800	3500	Volts
Maximum DC Blocking Voltage	V _{DC}	1200	1500	1800	2000	2500	3000	4000	5000	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) lead length at T _A = 50°C	I _(AV)	500				200				mA
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	30								Amps
Maximum Instantaneous Forward Voltage @ 0.5/0.2A	V _F	2.5			6.0		5.0	6.5		Volts
Maximum DC Reverse Current at Rated T _A = 25 °C	I _R	5.0								µA
Maximum Full Load Reverse Current, Full Cycle average 0.375" (9.5mm) lead length at T _A = 55°C	I _{R(AV)}	100								µA
Maximum Reverse Recovery Time Test conditions I _F = 0.5A, I _R = 1.0A, I _{RR} = 0.25A	t _{rr}	500								nS
Operating Junction Temperature Range	T _J	(-65 to +150)								°C
Storage Temperature Range	T _{STG}	(-65 to +150)								°C



RATINGS AND CHARACTERISTIC CURVES R1200F THRU R5000F

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

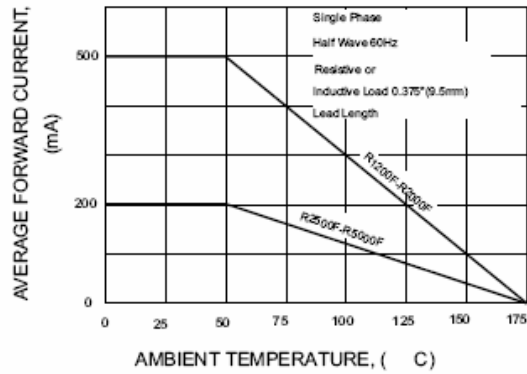


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

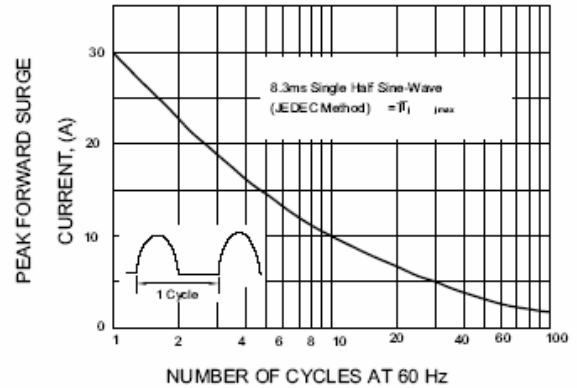


FIG.3-TYPICAL REVERSE
CHARACTERISTICS

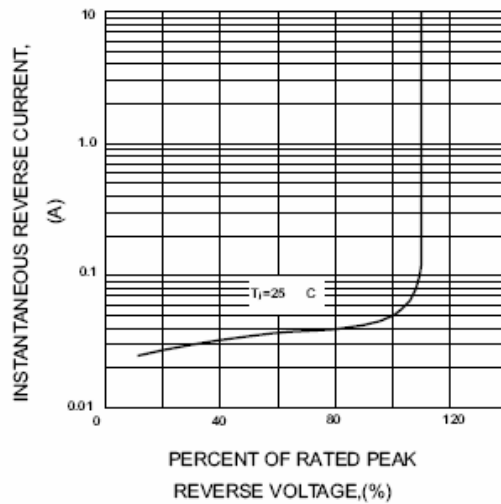


FIG.4-TEST CIRCUIT DIAGRAM AND
REVERSE RECOVERY TIME CHARACTERISTIC

